



DEPARTMENT OF THE NAVY
NAVAL RESEARCH LABORATORY
4555 OVERLOOK AVE SW
WASHINGTON DC 20375-5320

IN REPLY REFER TO
5720
Ser 1008/022
23 Jul 18

Mr. Richard W. Kulesh
135 Scrabbletown Road
North Kingstown, Rhode Island 02852

Subject: FREEDOM OF INFORMATION ACT CASE DON-NAVY-2018-008398

Dear Mr. Kulesh:

This is the Naval Research Lab's (NRL) final response to the Freedom of Information Act (FOIA) request dated June 8, 2018, in which you seek detailed prototype information, including any advancement of information to date, of full data for patent number 9,719,178.

FOIA requests received by NRL are forwarded to the offices within NRL having cognizance over the subject matter of the request, and a search is conducted of unclassified and classified records to identify responsive records. NRL conducted a search for responsive records within the following offices: Intellectual Property (Office of Counsel) and Material Science and Technology Division. We located the following 7 documents responsive to your request:

1. DiMascio et al., "Extraction of Carbon Dioxide from Seawater by an Electrochemical Acidification Cell Part I - Initial Feasibility Studies," Naval Research Laboratory NRL/MR/6180-10-9274 (July 23, 2010).

2. Willauer et al., "Extraction of Carbon Dioxide from Seawater by an Electrochemical Acidification Cell Part II - Laboratory Scaling Studies," Naval Research Laboratory NRL/MR/6180-11-9329 (April 11, 2011).

3. Willauer et al., "Development of an Electrochemical Acidification Cell for the Recovery of CO₂ and H₂ from Seawater," Industrial & Engineering Chemistry Research, 50, 9876-9882 (2011).

4. Willauer et al., "Development of an Electrochemical Acidification Cell for the Recovery of CO₂ and H₂ from Seawater II. Evaluation of the Cell by Natural Seawater," Industrial & Engineering Chemistry Research, 51, 11254-11260 (2012).

5. Willauer et al., "Feasibility of CO₂ Extraction from Seawater and Simultaneous Hydrogen Gas Generation Using a Novel and Robust Electrolytic Cation Exchange Module Based on Continuous Electrodeionization Technology," Industrial & Engineering Chemistry Research, 53, 12192-12200 (2014).

6. Willauer et al., "Development of an Electrolytic Cation Exchange Module for the Simultaneous Extraction of Carbon Dioxide and Hydrogen Gas from natural Seawater," Energy & Fuels, 1723-1730 (2017).

7. Willauer et al., "Test Plan NRL-Key West: Prototype Electrolytic Cation Exchange Module (E-CEM) for Extraction of Carbon Dioxide from Seawater and Simultaneous Production of Hydrogen."

After a thorough review of the documents identified above, we have determined that documents 1-6 are approved for unlimited public release and are attached as an enclosure. Document 7 is categorized as "Distribution D" technical data that can only be released to the Department of Defense (DoD) and U.S. DoD contractors. As such, we are denying the release of this document under exemption (b)(3). Exemption 3 requires the withholding of information prohibited from disclosure by another statute provided that the statute "(A) requires that the matters be withheld from the public in such a manner as to leave no discretion on the issue or (B) establishes a particular criteria for withholding or refers to particular types of matters to be withheld."


10 U.S.C. 130 and the DoD implementing directive, DoD Directive 5230.25, prohibit the disclosure of technical data with military or space application in the possession of, or under the control of, the Department of Defense, if such data may not be exported lawfully outside the United States without an approval, authorization, or license under the Arms Export Control Act. 10 U.S.C. § 130 is an exemption 3 statute.

You are advised of your right to appeal this decision. Should you decide to appeal, you must do so in writing to:

Department of the Navy
Office of the General Counsel
1000 Navy Pentagon, Room 4E365
Washington, DC 20350-1000

Your appeal must be postmarked within 90 calendar days from the date of this letter. A copy of your initial request and this letter must accompany the appeal. The appeal should be marked "FREEDOM OF INFORMATION APPEAL" both on the envelope and the face of the letter. In order to expedite the appellate process and to ensure full consideration of your appeal, it should contain a brief statement of the reasons you believe this decision to be in error.

If you have any questions concerning the foregoing, please contact Ms. Saleena Siraj, at 202-767-2244.


Saleena Siraj
By Direction